## REMARKS

Claims 1-37 are pending. Claims 1-14, 16-20, 22, 25-26, 28-37 are rejected under 35 U.S.C. § 103(a). Claims 15, 21, 23-24, 27, and 37 are objected to as depending from a rejected base claim. Claims 1, 3-8, 13, 15, 19, 21, 23, 28, 30, 35, and 37 are currently amended.

Claims 1-37 are objected to for informalities. Applicant has amended claims as specified by Examiner to overcome the cited informalities.

Claims 1-10, 13-14, 16-18, 20, 22, 25-26, 28-32, and 35-36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sourour et al., (U.S. Pat. No. 6,147,982) in view of Nystrom et al. (U.S. Pat. No. 6,526,091).

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). (MPEP § 2143.03). Moreover, the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). (MPEP § 2142).

Independent claim 1, as amended, recites "storing as a first set of correlation samples selected ones of the plurality of correlation samples that exceed the threshold and are within a first time sample period *and not storing other correlation samples that do not exceed the threshold and are within the first time sample period*, wherein each of the correlation samples in the first set has a corresponding sample time relative to the first time sample period; and *combining a second set of correlation samples with the first set of correlation samples*." Independent claim 28, as amended, recites "circuitry for storing as a first set of correlation samples selected ones of the plurality of correlation samples that exceed the threshold and are within a first time sample period *and not storing other correlation samples that do not exceed the threshold and are within the first time sample period*, wherein each of the correlation samples in the first set has a corresponding sample time relative to the first time sample period; and circuitry for *combining a second set of correlation samples with the first set of correlation samples*." (emphasis added).

As applicant understands the instant rejection, Examiner cites 17 (Figure 2) and C1 (Figure 6B) of Sourour et al. as "storing as a first set of correlation samples selected ones of the plurality of correlation samples that exceed the threshold and are within a first time sample period" (claim 1) and "circuitry for storing as a first set of correlation samples selected ones of the plurality of correlation samples that exceed the threshold and are within a first time sample period" (claim 28). Operation of the circuit of Figure 6B is described at col. 4, line 57 through col. 5, line 22. Therein, Sourour et al. disclose thresholds $\eta_1$ and $\eta_2$ as shown at Figure 5. At block 48, Sourour et al. test all 2N samples from SLED 14 (Figure 2) to see if any are greater than threshold $\eta_2$. First, if any samples are greater than threshold $\eta_2$, decision block 50 sends the largest H1 of these samples to block 52 to be stored as a candidate set. Sourour et al. do not disclose, however, that this candidate set of H1 samples is combined with another set of samples. Thus, Sourour et al. fail to disclose "combining a second set of correlation samples with the first set of correlation samples" as required by claims 1-37.

Second, if none of the 2N samples from SLED 14 (Figure 2) are greater than threshold $\eta_2$, decision block 50 sends all 2N samples to block 54 (Figure 6A) where they are compared against threshold $\eta_1$. If any samples are greater than threshold $\eta_1$, decision block 55 sends (GO TO B) all 2N samples to a respective history register 64 (Figure 6B) where they are stored in a respective column C1. All 2N samples from each time period j, therefore, are stored in a respective column C1-CM+1. (col. 5, lines 5-11). Sourour et al. do not disclose, "storing as a first set of correlation samples selected ones of the plurality of correlation samples that exceed the threshold and are within a first time sample period and not storing other correlation samples that do not exceed the threshold and are within the first time sample period" as required by claims 1 and 28. Thus, independent claims 1 and 28, and their respective depending claims are patentable under 35 U.S.C. § 103(a) over Sourour et al. in view of Nystrom et al.

Applicant has acknowledges the rejections of depending claims 11-12, 19, and 33-34 under 35 U.S.C. § 103(a), but considers them moot for the foregoing reasons.

In view of the foregoing, applicant respectfully requests reconsideration and allowance of claims 1-37. If the Examiner finds any issue that is unresolved, please call applicant's attorney by dialing the telephone number printed below.

Respectfully submitted,

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